

REMARKS/ARGUMENTS

Applicant has received the Office Action dated November 14, 2007, in which the Examiner rejected claims 10-10 under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Sismondi et al.* (U.S. Pat. No. 6,387,473, hereinafter "*Sismondi*") in view of *Miller* (U.S. Pub. No. 2002/0142141, hereinafter "*Miller*"). With this Response, Applicant has amended claims 1, 6 and 8.

I. CLAIM REJECTIONS UNDER 35 U.S.C. § 103(a)

Claims 1–10 are rejected in the Office Action under 35 U.S.C. § 103(a) as being unpatentable over *Sismondi* in view of *Miller*. The Office Action states that *Sismondi* discloses ink receiving layers that comprise a non-ionic surfactant, a binder, inorganic particles, an additional surfactant, a mordant and a hardener. It must be noted, however, that in *Sismondi* the non-ionic surfactant and the additional surfactant are not present in the same layer. See col. 3, lines 20–28, Claim 1, and also the Abstract of *Sismondi*, which states that

The present invention refers to an ink jet receiving sheet for ink-jet printers comprising a support and at least two ink receiving layers, wherein the ink receiving layer farthest from the support comprises a first non-ionic surfactant having a dynamic surface tension lower than or equal to 27 dyne/cm², and ... the other ink receiving layer(s) comprise(s) a second non-ionic surfactant having a dynamic surface tension higher than or equal to 30 dyne/cm². [underlining added]

In contrast, claim 8 as previously presented and as currently amended requires not only that the siloxane copolymer surfactant(s) and the non-siloxane surfactant(s) are together in the same ink-receiving layer, but also requires that the nonsiloxane surfactant comprises a nonionic or anionic surfactant that is present in the ink-receiving layer in a concentration less than that of the nonionic siloxane copolymer surfactant. These limitations are not taught by the combined teachings of the cited references. Instead, *Sismondi* teaches that its first and second non-ionic surfactants are in separate layers, one of which is disposed farthest from the support.

Claims 1 and 6 require that the siloxane copolymer surfactant(s) and the non-siloxane surfactant(s) are together in the same ink-receiving layer. These claims are currently amended to also require that the at least one nonsiloxane

surfactant comprises a nonionic or anionic nonsiloxane surfactant and that the layer contains a greater total amount of the nonionic siloxane copolymer surfactant than of the nonionic or anionic nonsiloxane surfactant by weight. This limitation is supported in the specification at paragraph [0015] and in original claim 8, for example. Claims 1 and 6 thus require limitations which are not found in the combined teachings of the cited references.

Even if the SILWET L-7605 surfactant disclosed by *Miller* were combined with the ink jet receiving sheet of *Sismondi*, as suggested in the Office Action, for the purpose of improving handling and sheet feeding characteristics, the resulting sheet would still not have all the limitations of any of claims 1, 6 or 8. To the contrary, from the combined teachings one of ordinary skill in the art would be led, at best, to try to substitute the SILWET L-7605 surfactant for the first non-ionic surfactant in the outermost layer (*i.e.*, "farthest from the support"), in order to improve the handling and sheet feeding properties. Thus, the resulting print medium would not have an ink-receiving layer that contains both nonionic siloxane copolymer surfactant and nonsiloxane surfactant, because the second non-ionic surfactant would still be contained in the separate "other" layer of *Sismondi*.

Moreover, there is insufficient guidance in either *Sismondi* or *Miller* as to how one of ordinary skill in the art would actually combine the SILWET L-7605 in such a way that the mandatory surface tension requirements of *Sismondi* would be met (*i.e.*, lower than or equal to 27 dyne/cm² in the outermost layer, and higher than or equal to 30 dyne/cm² in the "other" layer). There is a distinct possibility that the modification suggested in the Office Action might render the ink jet receiving sheet of *Sismondi* inoperable with respect to providing the minimum bleed, no mottle and good glossiness of the resulting sheet. Thus, there would have been no reasonable expectation of success if the suggested modification of *Sismondi* were made; and, even if the required properties of *Sismondi*'s multi-layer sheet were somehow retained, the resulting product would still have a multi-layered structure in which the siloxane and non-siloxane surfactants were in different layers. The combined teachings of *Sismondi* and *Miller* fail to teach the

combination of siloxane copolymer surfactant and non-siloxane surfactants in a single ink-receiving layer, much less the specified relative concentrations of siloxane surfactant(s) and non-siloxane surfactants as set forth in any of claims 1, 6 and 8. For at least the foregoing reasons, Claims 1–10 are patentable over the cited references.

II. ADDITIONAL CLAIM AMENDMENTS

Claims 1 and 6 are further amended to replace "ink-receiving layer consisting of" with "ink-receiving layer comprising," in order to ensure coverage of embodiments to which Applicant is entitled. The formatting of claims 1, 6 and 8 is also amended to include carriage returns between some of the limitations in order to improve the readability of the claim.

Claim 8 is further amended to make explicit that which was previously implicit, *i.e.*, that the nonionic or anionic nonsiloxane surfactant is present in said layer in a concentration that is less than the concentration of the at least one nonionic siloxane copolymer surfactant present in the ink-receiving layer.

III. CONCLUSION

In the course of these discussions, Applicant may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

Applicant respectfully requests reconsideration and withdrawal of the rejections, and that a timely Notice of Allowance be issued in this case. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby

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Account No. 08-2025.

Respectfully submitted,

/Carol G. Mintz/

Carol G. Mintz
PTO Reg. No. 38,561
CONLEY ROSE, P.C.
(713) 238-8000 (Phone)
(713) 238-8008 (Fax)
AGENT FOR APPLICANT

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
Legal Dept., M/S 35
P.O. Box 272400
Fort Collins, CO 80527-2400